

Amendments to the Claims

Please amend claims to be as follows.

1. (currently amended) A method of fault recovery by a switch in a local area network, the method comprising:
 - detecting a link failure at a port of the switch; and
 - clearing all medium access control (MAC) address entries from a MAC address table of the switch in response to the link failure detection and without receiving from outside the switch any signal that signifies that the MAC address table of the switch is to be cleared.
2. (previously presented) The method of claim 1, wherein clearing all MAC address entries from the MAC address table causes a discovery process to fill the table to begin immediately.
3. (currently amended) The method of claim 1, further comprising:
 - momentarily dropping a link on another port of the switch, wherein momentarily dropping a link comprises stopping transmission of a link signal for a period of time.
4. (original) The method of claim 3, wherein momentarily dropping the link on the other port causes propagation of the link failure to a next switch.
5. (previously presented) The method of claim 1, wherein the MAC address table is cleared of all MAC address entries by overwriting each entry in the table with a template from a register.

6. (previously presented) The method of claim 1, wherein the MAC address table is cleared of all MAC address entries by momentarily turning off power within the switch.
7. (original) The method of claim 3, wherein the link is momentarily dropped for a length of time sufficient for a next switch to detect the link drop.
8. (original) The method of claim 7, wherein the length of time is no more than fifty milliseconds.
9. (original) The method of claim 7, wherein the length of time is under ten milliseconds.
10. (currently amended) A network apparatus comprising:
 - a medium access control (MAC) address table; and
 - a plurality of ports wherein at least one port implements a link-loss-learn protocol wherein upon detecting a link failure at the port, the MAC address table is cleared of all MAC address entries therein without receiving from outside the apparatus any signal that signifies that the MAC address table of the apparatus is to be cleared.
11. (previously presented) The apparatus of claim 10, wherein upon clearing all MAC address entries from the MAC address table, a discovery process is begun by the apparatus.
12. (currently amended) The apparatus of claim 11, wherein the link-loss-learn protocol in which the MAC address table is cleared upon link failure detection without receiving from outside the switch any signal that signifies that the MAC

address table of the switch is to be cleared further comprises, upon detecting the link failure at the port, momentarily dropping links on other ports of the apparatus which implement the link-loss-learn protocol so as to propagate the link failure, wherein momentarily dropping a link comprises stopping transmission of a link signal for a period of time.

13. (original) The apparatus of claim 12, wherein the apparatus comprises a multi-port Ethernet switch.

14. (currently amended) A network comprising:
a plurality of Ethernet switches in a redundant topology,
wherein at least one switch implements a link-loss-learn protocol for rapid fault recovery,
wherein the link-loss-learn protocol comprises, upon detecting a link failure at a port of the switch, clearing a medium access control (MAC) address table of all MAC address entries therein, without receiving from outside the switch any signal that signifies that the MAC address table of the switch is to be cleared.

15. (previously presented) The network of claim 14, wherein upon clearing all MAC address entries from the MAC address table, a discovery process is begun by the switch.

16. (currently amended) The network of claim 15, wherein the link-loss-learn protocol further comprises, upon detecting the link failure at the port, momentarily dropping links on other ports of the switch that implements the link-loss-learn protocol in which the MAC address table is cleared upon link failure detection without receiving from outside the switch any signal that signifies that the MAC address table of the switch is to be cleared, and wherein momentarily dropping a link comprises stopping transmission of a link signal for a period of time.